3 months ($\beta=0.89$ (95% CI 0.03–1.74), $P=0.04$. 44.4 % of pts with CP level <20 mg/L achieved EULAR response after 3 months treatment, while 73.5 % of pts with CP level 20–40 mg/L and 55.2 % with ≥ 40 mg/L were responders. However, the difference in EULAR response between pts with CP level ≥ 20 vs. <20 mg/L did not reach statistical significance (OR 1.5 (95% CI 0.5–5.1), $P=0.48$).

Conclusions: Certolizumab serum levels ≥ 20 mg/L were associated with DAS28 improvement, but not significantly with EULAR response after 3 months treatment in RA pts. We suggest 20 mg/L as a lower target limit for non-trough CP samples in RA-patients. No additional benefit of having a certolizumab level over 40 mg/L was observed.

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SAT0186

TREATMENT RESPONSE OF INTRAVENOUS TOCILIZUMAB IN PATIENTS WITH RHEUMATOID ARTHRITIS BASED ON THE LEVEL OF PRIOR EXPOSURE TO BIOLOGIC THERAPY: RESULTS FROM THE KOBIO

K. Shin¹, S.-K. Lee¹, S. Oh², H.-A. Kim³, Y. W. Song⁴. ¹Division of Rheumatology, ²Department of Biostatistics, Seoul Metropolitan Government-Seoul National University Hospital Boramae Medical Center, Seoul, ³Division of Rheumatology, Ajou University School of Medicine, Suwon, ⁴Division of Rheumatology, Seoul National University Hospital, Seoul, Korea, Republic Of

Background: Previous studies have showed that response rate to biologic therapy in patients with rheumatoid arthritis (RA) are lower in those who had prior exposure to multiple biologic agents compared with first-time users. However, most of these studies targeted on patients undergoing anti-TNF therapy.

Objectives: To investigate the treatment response of RA patients using intravenous tocilizumab (TOC) as the first biologic agent, comparing with those who had prior exposure to other biologic agents

Methods: Data of RA patients treated with TOC were obtained from the Korean College of Rheumatology Biologics Registry (KOBIO). Patients were grouped as first (1st)-line, second (2nd)-line, and third or more (≥ 3 rd)-line users. Clinical outcomes including SDAI changes at the first year and second year of TOC therapy were evaluated, and subsequent switching to another biologic agent and its associated factors were analyzed using the Cox proportional hazard model.

Results: A total of 408 patients were included in the study; 1st-line (n = 258), 2nd-line (n = 95), ≥ 3 rd-line (n = 55) users. The mean age was 54.0 years, and mean disease duration of 8.2 years. At baseline, mean SDAI was 30.0, and 7.1% of patients were treated without a concomitant conventional DMARD, which increased to 21.6% at the end of the second year. The clinical response of related parameters in 1st-line TOC users were more robust than the 2nd-line or ≥ 3 rd-line users, and greater proportion of 1st-line users achieved remission or low disease activity at the second year ($p=0.00291$) (figure). In addition, switching to another agent was more frequent in the 2nd-line or ≥ 3 rd-line users within 2 years (1st, 2nd, ≥ 3 rd-line users, 4.7%, 15.1%, 11.1%, respectively). A multivariate analysis revealed that higher baseline SDAI (HR 1.1018, $p=0.00680$) and multiple prior exposure to biologics (HR 2.5751, $p=0.0139$) were predictors of subjects switching to other agents.

Conclusions: Amongst RA patients with high disease activity who receive TOC, patients naïve to biologics have better treatment response and lower switch rates after two years.

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SAT0187

GOLIMUMAB IMPROVES WORK PRODUCTIVITY AND ACTIVITY IMPAIRMENT IN PATIENTS WITH RHEUMATOID ARTHRITIS (RA), ANKYLOSING SPONDYLITIS (AS) AND PSORIATIC ARTHRITIS (PSA): 1-YEAR RESULTS FROM A NON-INTERVENTIONAL TRIAL IN GERMANY

I. Klaudius¹, K. Krueger², S. Remstedt³, A. Thiele⁴. ¹MSD Sharp & Dohme GmbH, ²Praxiszentrum St. Bonifatius, Munich, ³Rheuma Praxis, Berlin, ⁴Krankenhaus St. Josef, Wuppertal, Germany

Background: Non-interventional studies (NIS) are essential instruments in pharmaceutical research not only for pharmaceutical companies but also for regulatory authorities or reimbursement bodies in Germany.

Aside from direct costs caused by a disease, German sick funds as well as health authorities have a keen interest in indirect costs, such as costs derived from loss of work productivity.

Objectives: It is the aim of this study to show the benefit of Golimumab (GLM) in work productivity and activity for RA, AS and PsA patients in Germany. The analysis was performed using the validated indication-specific Work Productivity Activity Impairment (WPAI) Questionnaire as primary endpoint. The WPAI is rated to be the most psychometrically validated and frequently used instrument for measuring of health-related work-productivity.

Methods: As primary endpoint, the change of work productivity impairment and ability for daily activities in month 3 (V1) versus baseline visit (V0) was evaluated. All 4 subscores of the WPAI were analysed: disease related absence from work (absenteeism), working while sick (presenteeism), total work productivity impairment (TWPI) and activity impairment with TWPI as primary score.

In addition, an evaluation of the activity impairment in the mITT population (modified-Intention-To-Treat) was performed.

As exploratory endpoint, the change in work productivity/activity impairment after 6 months and 12 months versus baseline as measured by WPAI for PsA, RA and AS patients treated with Golimumab in German clinical practice was evaluated.

Results: Of 748 patients (100%) who started treatment with Golimumab at V0 (baseline), 666 (89.0%), 634 (84.8%) and 552 patients (73.8%) continued treatment until V1 (Month 3), V2 (Month 6), and V3 (Month 12/end of observation period), respectively.

Efficacy analyses were performed on the mITT population which included 700 patients (RA=237, PsA=235, AS=228) who had at least 2 documented visits.

The statistically significant improvements (all p-values <0.05) in the mean WPAI domain scores were maintained over the 12-month observation period in all 3 indications with a higher treatment effect regarding "activity impairment" and "presenteeism" than with "absenteeism". The magnitude of improvements in the 4 WPAI domains and the time course of improvements varied between the underlying disease (RA, PsA, AS).

In general, the improvements in the 4 WPAI domains were greater in patients with AS and PsA compared to RA patients. A continuous improvement over time was seen in AS patients regarding the domain "activity impairment". A positive effect of pre-treatment with biologics (i.e. better improvement in WPAI) was seen in RA